AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 4, lines 11-19, and starting with "After the motion estimate", with the following amended paragraph:

After the motion estimate 114 is computed, the motion estimate 114 may be used to perform post processing motion operations 116, such as warping, morphing, motion blurring, stabilization, image sharpening, mosaic generation or other effects, on the input images 100, 102. Various post-processing operations, and methods for computing optical flow, are described in ~~a related~~ application serial number 09/657,699, filed September 8, 2000, and entitled "Interpolation Of A Sequence Of Images Using Motion Analysis," now U.S. Patent No. 6,665,450, and ~~U.S. patent applications~~ application serial number 09/838,868, filed April 20, 2001, entitled~~,~~ "Correcting Motion Vector Maps for Image Processing" ~~by Katherine Cornog and Randy Fayan~~ now pending, and application serial number 09/839,160, filed April 20, 2001, entitled "Interpolation of a Sequence of Images Using Motion Analysis" ~~by Katherine Cornog, et al., filed on even date herewith~~, now U.S. Patent No. 6,570,624, and hereby incorporated by reference.

Please replace the paragraph beginning on page 4, line 20, and ending on page 5, line 2, with the following amended paragraph:

Fig. 2 is a dataflow diagram illustrating more detail of an example computation of a motion estimate that may use both the input images 100, 102 (Fig.1) and the single channel images 108, 110 (Fig. 1). The input images 200, 202 are processed by luminance selection 204, 206 to generate a luminance or grey-scale image 208, 210. The luminance images 208, 210 are blended with their respective single channel images (based on characteristic measurement) 212, 214 (see 108, 110 in Fig. 1) by blend operations 216, 218 to produce output images ~~220, 222~~ 230, 232. The blend operations may be implemented, for example, by a typical alpha blend of the function $C_{x,y} = \alpha A_{x,y} + (1-\alpha)B_{x,y}$, where $C_{x,y}$ is a pixel at coordinates (x,y) in the output image, α is a blend value in the range of zero to one, $A_{x,y}$ is a pixel in one of the input images, and $B_{x,y}$ is a pixel in the other of the input images. The blend value α (226, 228) may be specified by a user through any conventional user interface technique for obtaining user input. If

$\alpha=0$ or $\alpha=1$, one of the images input to the blend is output, and the other image has no contribution to that output.